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(54) SEMICONDUCTOR INTEGRATED CIRCUIT **DEVICE AND PACKAGING STRUCTURE** THEREFOR

(57) Abstract:

PURPOSE: To facilitate high density packaging of an LSI package by laminating a second package body on a first package body and inserting a lead pin protruding downwardly from the lower surface of a second package body into a through-hole formed through the upper surface of the first package body.

CONSTITUTION: A second LSI package 1 is laminated on an LSI package 1, and a lead pin protruding downward from the lower surface of a package body 2 of the second LSI package 1 is inserted into a through-hole 9 formed through the first LSI package 1 and the lower end of the lead pin 11 is brought into contact with the upper end of the first LSI package 1 lead pin 11. Thereupon, soldering, paste is deposited beforehand on the lower end of the second LSI package 1 lead pin 11 on the upper end of the first LSI package 1 lead pin 11. Thus, by successively laminating

a desired number of the LSI packages 1 and thereafter conveying a substrate 12 into a reflow furnace and heating and melting the soldering paste, the lead pin 11, a mount pad 13, and the lead pins 11 of the upper and lower LSI packages 1 are fixed by solder.

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